

WHAT IS CLAIMED IS:

1. A deposited film forming apparatus comprising
a power applying electrode disposed above a flat plate
type base member grounded, in a vacuum chamber, and a
5 power source for supplying a power to the power
applying electrode,

the deposited film forming apparatus being
constructed to supply the power from the power source
to the power applying electrode so as to generate a
10 plasma in a discharge space between the power applying
electrode and a substrate disposed in opposition to the
power applying electrode in the vacuum chamber and
serving as an electrode in a pair with the power
applying electrode, thereby decomposing a source gas
15 introduced into the vacuum chamber to form a deposited
film on the substrate,

wherein the power applying electrode is fixed to
the base member with the power applying electrode being
20 isolated from the base member.

2. The deposited film forming apparatus according
to Claim 1, comprising a mechanism for conveying the
substrate.

25 3. The deposited film forming apparatus according
to Claim 2, wherein the mechanism for conveying the
substrate is of a roll-to-roll system, and the

deposited film is formed while the substrate is conveyed thereby.

4. The deposited film forming apparatus according
5 to Claim 1, wherein the distance between the power
applying electrode and the substrate is 5 mm to 20 mm.

5. The deposited film forming apparatus according
to Claim 1, wherein the power applying electrode is
10 fixed to the base member with an electrically
insulating, fastening member.

6. The deposited film forming apparatus according
to Claim 1, wherein the base member is disposed around
15 the power applying electrode and the power applying
electrode is fastened by the base member.

7. The deposited film forming apparatus according
to Claim 1, wherein the base member is held between and
20 fastened by the power applying electrode and a power
introducing portion penetrating the base member in
order to supply the power to the power applying
electrode.

8. The deposited film forming apparatus according
to Claim 1, wherein the power applying electrode and
the base member are fixed with an electrically

*said power
introducing
electrode*

insulating adhesive.

9. The deposited film forming apparatus according to Claim 1, wherein the power applying electrode is
5 fixed to the base member at an end portion of the power applying electrode.

10. The deposited film forming apparatus according to Claim 1, wherein the power applying
10 electrode is fixed to the base member at a position effective to suppress deformation of the power applying electrode.

11. The deposited film forming apparatus
15 according to Claim 1, wherein an electrically insulating spacer is placed between the power applying electrode and the base member.

12. The deposited film forming apparatus
20 according to Claim 1, wherein an electrically insulating material is filled between the power applying electrode and the base member.

13. The deposited film forming apparatus
25 according to Claim 1, wherein the distance s [mm] between the power applying electrode and the base member satisfies the relation of $s \leq k/P$, where P [Pa]

is a pressure in the vacuum chamber during formation of the deposited film and k is a constant of 1500 [Pa·mm].

14. A method of forming a deposited film
- 5 comprising using the deposited film forming apparatus as set forth in any one of Claims 1 to 13.